

Borough of



Barnsley.

REPORT

OF THE

SANITARY CONDITION OF BARNSLEY

AND THE

Work of the Isolation Hospital

In 1910,

SUBMITTED TO THE TOWN COUNCIL

BY

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OXON.,

MEDICAL OFFICER OF HEALTH,

MARCH, 1911.

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BOROUGH OF BARNLSLEY.

R E P O R T

OF THE

MEDICAL OFFICER OF HEALTH,

For the Year 1910.

To the Sanitary Committee of the Town Council.

Gentlemen,

Meteorological.

1910 was a cold, wet year, for although the warm days of the year were slightly over the average, June, July, and August—when one expects summer weather—were spoilt by some of the heaviest rainfalls of the year, and consequently the hot days on which the thermometer reached 70 degrees were only 23 in number, as compared with an average of 35·2 for the past 40 years. This absence of any prolonged spell of hot weather resulted in the temperature of the earth at four feet below the surface remaining below 56 degrees throughout the year, for which the only precedent is 1902 among records which go back 18 years.

The days of frost were 52 in number, or 1 below the average of the preceding 40 years.

One hundredth of an inch (or more) of rain fell on 209 days, or 20 more than the average. The total rainfall of 29·54 inches, though above the average for the past 40 years, did not equal the amount that fell in the previous year.

The deficiency of hot days and the excess of rainy ones does not seem to have been prejudicial to the health of the Borough. In fact, for the first half year the death rate did not exceed 14 per thousand; and for the whole year the corrected death rate of 15·86 is the smallest which appears in the records of Barnsley, which go back to 1868, and there has been nothing nearly so low since 1894.

General Statistics.

The gross total of deaths registered in the Borough was 794, no less than 80 below the average of the past 10 years, and with the exception of 1905, the smallest number during those 10 years. Of these 794 deaths, 55 were those of non-residents brought for treatment to Public Institutions in the Borough, viz:—the Beckett Hospital and the Workhouse. There were therefore only 739 deaths of Residents registered in Barnsley, but to these have to be added 22 deaths of Residents occurring in Public Institutions outside the Borough, 8 of which deaths occurred in the West Riding Lunatic Asylums, 10 in the Kendray Hospital, and 4 in Workhouses or Hospitals of other Towns. The nett number of deaths for the year is therefore 761, or 70 less than the average of the past 10 years, and fewer than in any individual year of the previous 10, with the exception of 1905.

1,581 Births were registered during the year in the Borough, a number which is 64 more than the average for the past 10 years, though owing to the increase of the population the proportion is lower than in any previous year.

The estimation of the population of a Borough like Barnsley is an extremely difficult task. If the number of persons per house is the same as at the last Census, the population should now be over 49,000, but between the last Census and the Census of 1891 the population per house had quite definitely fallen from 5 persons per house to 4.79, and I think that the tendency to a continuous decrease has probably continued, and therefore I think it safer to estimate the population of Barnsley on the First of June, 1910, to have been 48,000 people. On this basis the Net Death Rate for the year is 15.86, and the Birth Rate 32.95.

As reported at your monthly meetings, up to the end of June we had a record year, as the death rate for each of the first six months did not exceed 14. The second half of the year has made these figures somewhat worse, very largely on account of a serious epidemic of Whooping Cough, which had indeed started in the second quarter of the year, but attained its maximum in August.

Infant Mortality.

Among infants or children under 1 year there were 244 deaths, giving an Infant Mortality of 154.32, which is nearly 20 per 1,000 births higher than last year but 15 per 1,000 less than the average of the preceding 10 years. Of these 244 deaths 40 were caused by Diarrhoea, but of these deaths a certain proportion occurring in the Spring or Winter months should not be classified as Epidemic Diarrhoea, for in those months Diarrhoea is not epidemic, but due to improper feeding.

The next most important cause of deaths of infants is Premature Birth, which caused 37 of the deaths; and the frequency of this cause of deaths of infants in Barnsley has always been somewhat of a puzzle to me, for the factories in which women work are very few in number and can hardly have an appreciable influence. There is no lead-poisoning in Barnsley, and therefore this is not a factor. The remaining two causes to which Premature Birth is most frequently attributed are alcoholism and deliberate attempts to shorten the period of pregnancy, but whether these are factors in the case of Barnsley I am not prepared to say.

Whooping Cough, with 29 deaths of infants, took the next most serious toll; and after that Debility or Atrophy, Pneumonia, and Bronchitis. These last two caused between them 44 deaths of infants, and from the casual way that I have seen children treated sometimes in Barnsley, I am not altogether surprised.

The proportion of deaths under 1 year to the total deaths is 32·06 per cent., or just about the average of the last 10 years; and the deaths under 5 years are 45·85 per cent. of the total deaths, which is again practically the average of the last 10 years.

Zymotic Diseases.

(See Table V.)

*The deaths caused by the seven principal Zymotic Diseases were 129 (83) in number, or 21 less than the average of the preceding 10 years. The Zymotic Diseases causing a decreased number of deaths are Measles 8 (26), Scarlet Fever 1 (3), Enteric Fever 7 (10), and those causing an increased number, Whooping Cough 53 (1), and Diarrhœa 57 (43), Smallpox for the fifth year in succession produced neither cases nor deaths.

The Zymotic death rate for the year is 2·66 (1·78) which is satisfactorily below the average of the previous 10 years, but a decided increase on the Zymotic death rate of 1909. Whooping Cough and Diarrhœa are responsible for very nearly the whole of the Zymotic death rate.

Scarlet Fever.

(See Table D.)

Of the notifiable diseases, Scarlet Fever produced the greatest number of cases, but the fewest recorded in any given year since the introduction of the Notification Act. The total number of notifications received was 84, as compared with 104 in 1909, and an average of 245·8 for the past 10 years. Up to the end of June only 20 cases of Scarlet Fever had been notified, but in July, September, and October there was a considerable increase in the number of cases, the maximum prevalence being in October, with a slight diminution in

* (1909 figures in brackets.)

November and December. Of the 84 cases, 71 were isolated at the Kendray Hospital, and one of these cases proved fatal, the only death from Scarlet Fever during the year.

Enteric Fever. There were only 23 cases notified as Enteric Fever, or the smallest number since 1892, and of these 23 cases three should certainly be deducted, if not four, as under the more continuous observation in the Hospital they proved to be other diseases. As is not unusual when Enteric Fever is rather scarce, it made up for this scarcity in number by the severity of the cases, there being no less than 7 deaths among the 20 genuine cases of Typhoid, giving the very appalling case fatality of 35 per cent. The probability seems to be that under the cold and wet conditions of the past year, the Typhoid organism is unable to multiply outside the human body unless it is of a particularly virulent variety.

Of the 23 cases notified 3 only were nursed at home, and of these three 2 died; of the 20 cases removed to the Hospital 5 were definitely not Typhoid Fever, leaving 15 of which 5 died, or 33 per cent., figures which I think prove my contention that when Typhoid did occur in Barnsley in the past year it was of a most virulent kind.

Diphtheria. There were 22 cases of Diphtheria or Membranous Croup notified, of which 18 were removed to the Kendray Hospital. 2 of the cases proved fatal. There was no definite source of the cases throughout the year, *i.e.*, we could trace no connection from one case to another, neither through Schools, nor milk, nor personal contact, and no one part of the town suffered more than another.

Erysipelas. The 29 cases of Erysipelas were all carefully investigated. In one case the house was found to be overcrowded, but no sanitary defect was found in any of the other houses that were concerned. 3 of the cases, unfortunately, proved fatal.

Puerperal Fever. One case of Puerperal Fever occurred in December but no Midwife was concerned. This disease continues to be satisfactorily rare in Barnsley.

In all cases of Notifiable Infectious Diseases each case is visited as soon as possible after the receipt of the Notification, and the sanitary condition of the premises is investigated. The milk supply, the amount of bedroom accommodation, and the number of occupants of the bedrooms are ascertained, and the parents or friends of patients suffering from Scarlet Fever, Diphtheria, or Typhoid Fever are urged to take advantage of isolation in the Kendray Hospital. In cases of Scarlet Fever

and Diphtheria, any School attended by the children from the infected house is warned of the danger of infection, and to exclude such children for a specified time. When the patient has been removed to the Hospital. or, if kept at home has sufficiently recovered, the house is disinfected by a spray of formalin solution, while any clothes or bedding are disinfected by steam in a "Thresh" Steam Disinfecter.

Diarrhœa.

Of the Infectious Diseases that do not come under the Notification Act, Diarrhœa caused 58 deaths. 1 of these was a person over 70, another of a person between 50 and 65, one of a child between two and 5, 10 were children between 1 and 2, and 45 were among Infants. When any person dies of a disease in which Diarrhœa is one of the symptoms, it seems to have become a fashion to certify such patients as dying of Epidemic Diarrhœa, even in the winter months of the year when Diarrhœa is certainly not epidemic. In July, August, and September, and possibly the first part of October, such deaths may reasonably be counted as Epidemic Diarrhœa, a disease for which privy ashpits and the flies that breed therein are largely responsible. In the other months of the year diarrhœal deaths are much more likely to be due to that improper feeding which we have during the last two or three years, done all we could to prevent, by the dissemination of knowledge through a Lady Visitor. In July, August, and September, there were 36 deaths from Diarrhœa. Of the deaths in the third Quarter I have already made the following Report :—

"Diarrhœa in the third quarter of 1910."

"During the months of July, August, and September there occurred in Barnsley 36 deaths from Diarrhœa. The average number of deaths from Diarrhœa for the 15 years 1895—1909 was 74 per annum.

The Local Government Board have asked for a special report on this year's epidemic.

Four of the deaths were in July, eleven in August, and twenty-one in September.

29 of the deaths were among infants.

6 of the deaths were among children over 1 and under 2 years of age.

1 of the deaths was a child of over 2 years.

There have been no days this year with the 4-foot earth temperature over 56 degrees F. On the other hand there were a great number of house flies hatched out in the latter part of August and in September.

To the latter fact probably the increased number of deaths in September was due.

To the former the satisfactory decline in the number of Diarrhœa deaths during the quarter was partly due; but you are also entitled to take credit for the work done by your lady visitor, and for the increasing number of conversions of privy ashpits into water closets.

With regard to the future, you are hoping shortly to get a refuse destructor built, and you are agreed as to the most suitable site, and the hindering power is not public opinion nor any procrastination on your part. It is only when your destructor is built that a campaign against flies can be undertaken with prospect of success."

6th December, 1910.

If to those 36 deaths in the third Quarter be added, 7 deaths from Diarrhœa in October it gives a total of 43 deaths, which may reasonably be attributed to Epidemic Diarrhœa and flies, that is to say, to conditions which, as a Sanitary Authority you are bound to use every effort to combat.

The Lady Visitor's work is shown to be very necessary by the number of cases of improper feeding found by her. The other factor, the privy ashpit, you are diminishing at the rate of 110 Clean Water Closets substituted for the old Privies every year, and this rate of conversion is being well maintained. As it seems to be generally admitted now that flies convey the germ of the disease from their residence in heaps of rubbish to the houses of the victims. The only step further that can be taken will depend on the erection of a refuse destructor, which is a matter you now have in hand. When you have such a destructor, with the constant diminution of privy ashpits which is taking place, it will be possible to arrange a more frequent clearing of manure heaps, which with the privy ashpits themselves are the most fertile source of house flies.

Phthisis.

During the year 50 deaths were caused by Phthisis or Pulmonary Tuberculosis, giving a Phthisis death-rate of 1.04, a figure which is certainly not very largely in excess of that of many other towns of a similar size in the West Riding.

When the examination of Elementary School Children began, a very large number of the children examined in the first year were found to be suffering from Phthisis, but a much smaller number were found to be so suffering in the following year; and there is good reason to believe that this smaller number represents the actual facts, and that the figures of the first year were unduly inflated by special examinations which were not distinguished from the routine examinations.

On the foundation of those exaggerated figures of the first year, for which, of course, I am responsible, I regret to say that Barnsley has been given what is really undeserved prominence in this matter of Consumption. We have, however, already made a most successful step in combating this disease among the children by opening the Open-Air School, and I know there is a good deal of private effort being made to combat this disease in older patients by the use of Tuberculin.

**Phthisis and
Sanatoria.**

In the Autumn of the year 1910 your Representatives were invited to attend a Conference at Leeds in connection with the proposed West Riding Sanatorium for Consumption to be erected in Nidderdale. The meeting was very fully attended by Representatives of all the other Sanitary Authorities of the West Riding, who were very largely opposed to the scheme propounded to them.

I, during the year, had advised you against becoming a contributing Authority under the scheme, and I founded my opinion on two sets of reasons, the first being Medical and the second being Financial. I feel that it is a very serious thing to offer such advice in opposition to a scheme propounded by so eminent a Public Health Authority as Dr. Kaye, but the scheme has been before the West Riding County Council for two or three years, and what might have seemed to me a very desirable scheme in 1907, in 1910, by the advance of medical knowledge, has become somewhat less desirable, and, from a financial point of view, even risky. It must not be forgotten that there are a number of Sanatoria for Consumption up and down the country to which it will be possible for you to help to send any suitable cases from Barnsley. Therefore, not being a contributing authority to this particular scheme would not debar you from availing yourselves of sanatorium treatment for suitable cases in the town, were you so disposed.

It so happens that Sheffield is proposing to build an open-air Sanatorium also, and the scheme was discussed by all the most prominent Doctors in Sheffield, and as a result of that discussion they passed unanimously, certain resolutions, and one of those was that under the present conditions the number of patients

dealt with by the City Authorities who are likely to benefit permanently from treatment, is too small to justify the provision of a sanatorium by the ratepayers for Sheffield only.

This resolution was passed in consequence of the opinion expressed by Dr. Scurfield, Medical Officer of Health, Sheffield, to the effect, that as the result of keeping cases of Consumption under observation at Moor End and Crimicar Lane, he had concluded that the class of consumptives likely to benefit from sanatorium treatment in Sheffield, as a whole, would not require more than 10 beds in any Sanatorium each year. Supposing that the same were true of Barnsley, proportionately, this means that one bed in any given Sanatorium would be sufficient to deal with cases suitable for sanatorium treatment.

Further, in Germany, in many places, and in England in a few, Tuberculin Dispensaries are receiving serious attention, as a method of dealing with Consumption.

The treatment is now being privately tried in Barnsley with, so far, extremely satisfactory results; so much so that I think that in the near future it may become very advisable for you to start a Tuberculin Dispensary, but that such a course should wait till the opinion of the Medical Profession is more unanimous as to the results of this treatment.

In the next place, the results of the treatment of tuberculous children in the Barnsley Open-Air School are so startling that I feel that here again is a promising method of dealing with Tuberculosis, and a method which has this advantage, that it tackles the Consumptive in the early stages, and not as a Sanatorium so often tries to do, in the late stages when there is not much prospect of improvement. This difficulty in the case of Sanatoria has proved to be so great that not much more than 30 per cent. of the cases admitted are permanently cured, chiefly because workers will not seek treatment or consent to treatment in the very earliest stages.

Lastly, perhaps by reason of the particularism which has been the pride and the bane of this part of the country since the days of the Heptarchy, the West Riding County Council has thought it essential to place their Sanatorium within the boundaries of the West Riding; and in their effort to escape the smoke zone of the manufacturing towns, have gone to a place beautiful enough in the summer months, but blessed with as many rainy days as Barnsley itself, and with a rather heavier rainfall.

Turning to my financial reasons; the sum proposed to be spent on this West Riding Sanatorium is £16,000, to provide about

100 beds. Now, the Organizer of a Consumptive Colony at Clacton-on-Sea, which was the most up-to-date of Sanatoria and gave better results than other more expensive Sanatoria, convinced the Sheffield Medical Society that the capital cost of a Colony suitable for Consumptives need not be more than £100 per bed. In the last 3 years therefore, such progress has been made, that the West Riding proposal is on old-fashioned and extravagant lines from the point of view of 1910.

If you were to become a Contributing Authority you would be saddled indefinitely with the responsibility of an Institution on which unnecessary money had been spent and an Institution which might partly be put out of date by the Tuberculin Dispensary. I think that if Sheffield start a Sanatorium it might be very much more to your advantage to ask Sheffield to allow you to utilise such small number of beds as you might require from time to time. In any case all the other Sanatoria of the Country are open to you, and therefore, for all these reasons I have advised you not to be a Contributing Authority to the County Council Scheme.

If the Council desire to do something at once to fight Tuberculosis in the Borough, it can do a very great deal of good by joining with the Education Committee in making more free places at the Open-Air School for those Tuberculous children whose parents are not able to pay for the food supplied at the School; and this course, for the reason stated, I think will be more beneficial to the town than helping to send grown-up workers to Sanatoria.

It should be remembered that accommodation is available at the Workhouse Infirmary for educational treatment of Tuberculosis, and it might be possible to utilise this for the district. The advantage of such a course would be that the occasional case which is really suitable for Sanatorium treatment would thereby be selected and the unsuitable case saved time and disappointment.

Measles.

The previous year's epidemic of Measles seems to have come to an end in January, when four deaths were registered from this disease. There were four other deaths—one in May, one in July, one in September, and one in October, which point to a certain amount of Measles throughout the year, but not on an epidemic scale.

Whooping Cough.

Whooping Cough, on the other hand, caused a very serious number of deaths—53 in number. The epidemic seems to have made a start about April, to have begun to increase through June and July, and in August was responsible for no less than

18 deaths. From that point came a diminution—nine deaths in September, five in October, and four in November, being followed by a recrudescence in December, when there were seven deaths. We made some effort, by School closure, to check the course of the epidemic.

Blackburn Lane Infants' Department was closed from the 30th of May to the 26th of June, when it was known there were 60 cases amongst the 268 children on the register; and afterwards for a further period of two weeks from the 5th to the 19th of July.

St. John's Infants' School was closed from the 5th of June to the 3rd of July, when there were 28 cases among the 135 children on the register.

Holyrood Infants' School was closed from the 17th of June to the 15th of July, partly on account of Measles and partly on account of Whooping Cough, there being 21 cases of Measles and 3 cases of Whooping Cough among the 197 children on the Register.

Agnes Road School was closed from 11th July to 1st August.

St. George's Road, Baker Street, and Park Road Infants' Schools were closed from 19th to the 28th of July, when the holidays began, also on account of Whooping Cough, and in December, the Beckett Street Infant School was closed from the 8th of December to the 5th of January, 1911, because 12 per cent. of the children on the register were suffering from Whooping Cough.

In retrospect, it is an easy criticism to make, that the closure might have had a more beneficial effect had it taken place earlier. I am now endeavouring to make arrangements whereby all cases of Infectious Diseases occurring in the Elementary Schools, should come before my notice week by week, in accordance with the recommendation of Dr. Crowley of the Board of Education. So serious is the fatality caused by this disease when it becomes epidemic, that I think we should try to get better results by closing an Infants' School as soon as 10 per cent. on the register were actually suffering from Whooping Cough, instead of waiting till a larger proportion of cases had occurred.

Influenza.

Influenza caused 13 deaths during the year, in January, February, April, May and November. Perhaps the cold Spring and the cold spell in November when there were 16 days of frost and a good deal of snow accounts for the prevalence of this disease at those times.

The Seven
Principal
Zymotic
Diseases during
the last 40
years.

In connection with the Infectious Diseases, I should like, this year, to call your attention to Table C, which records the number of deaths in Barnsley from the seven principal Zymotic Diseases during the four past decades. It is to be remembered that between 1871 and 1910 the population of Barnsley has grown from 23,000 to 48,000, or more than doubled; and if the deaths from infectious diseases during the past 10 years had been proportionate to their numbers in the decade 1871—1880, the figures should in each case have approximately doubled also.

Smallpox caused only 11 deaths in the past 10 years, as against 9 in the earlier decade.

Measles, as perhaps might be almost expected, has increased in proportion to the population. I say "as might have been expected" for there is, as yet, no known means of obtaining immunity from this disease, and sooner or later in their lives practically every person in England has an attack of Measles; and when we consider the difficulties of isolating Measles in the great majority of homes, and also the increased facilities children have of contracting Measles by reason of their compulsory attendance at the Elementary Schools, it is hardly surprising that there should be no improvement in the death rate from this disease.

Diphtheria increased through the first three decades from 23 to 65 deaths per decade, but at that point, in spite of the increased population, the increase has stopped. I think it extremely probable that this is due in part to our having been able to take in Diphtheria at the Kendray Hospital in the last five years, and to the reduction of the case fatality consequent on the use of anti-toxin treatment.

Whooping Cough, like Measles, has increased practically in proportion to the population, and although it is not so universal a complaint of children as is Measles, yet it is perhaps even more fatal.

Typhoid Fever in the last 10 years shows an actual diminution as compared with the previous 10, and it has caused 60 less deaths from 1901 to 1910 than in the years 1871 to 1880.

Diarrhœa is proportionately not so large a feature in causing deaths now as 40 years ago. The increase is not proportionate to the population nor is the increase of deaths in this last decade, over the previous one, so great as might have been expected, probably because of the steady diminution in the number of privy ashpits.

Scarlet Fever is unique among the 7 diseases in having declined enormously as a cause of death. In the first of the four decades Scarlet Fever caused 342 deaths; in the second decade, 355; then in 1891 came the opening of the Kendray Hospital, and in the next decade we only had 135 deaths and in the last 10 years the number has been further reduced to 88.

Some few years ago an eminent Medical Officer of Health of one of the larger Midland Towns was loud in his condemnation of isolating Scarlet Fever in hospitals on the ground that it increased the severity of the disease. I cannot help thinking that the Statistics of Barnsley since the opening of the Kendray Hospital disprove his contention. Not only has the death-rate decreased but the actual prevalence seems to have steadily diminished, as the figures in Table D shew, if regard is had to the annual increase of the population.

Conference on
the permanent
care of the
feeble minded.

In November you sent Delegates to a Conference held at Leeds, on the permanent care of the feeble-minded, with a view to future contingencies should there be any considerable change made in the present Poor Law.

On Wednesday, November 16th, Sir William Chance read a very interesting paper, on the care and control of the feeble-minded, that is to say:—

“Persons who are capable of guarding themselves against common physical dangers, who may be capable of earning a living under favourable circumstances, but are incapable from mental defect existing from birth or from an early age: (a) of competing on equal terms with their normal fellows; or (b) of managing themselves and their affairs with ordinary prudence.”

but are yet not of unsound mind so as to come under the present lunacy laws.

After pointing out how large a proportion of the inmates of Inebriate Homes and “Rescue” homes are feeble-minded persons, Sir William showed (1) how hereditary is mental deficiency, (2) that mentally defective parents were far more prolific than normal parents, (3) that Education Authorities could provide for feeble minded children up to the age of 16 and that then just when further control was needed it ceased. To meet this difficulty Sir William advocated the provision of farm colonies like the one successfully carried on by the Lancashire and Cheshire Society, and further, to make such colonies really successful and useful to the nation, urged the necessity of Parliament giving powers of detention in suitable

cases upon medical certificates in accordance with the recommendation of the recent Royal Commission.

The meeting of representatives unanimously endorsed these two suggestions.

On Thursday, November 17, Miss Dendy (the Hon. Sec. of the Lancashire and Cheshire Society for the Permanent Care of the Feeble-minded), gave a masterly account of the colony at Sandlebridge and also of what is done in certain American Colonies, and made it clear to the meeting that any Yorkshire Association must work on the same lines.

In the afternoon the meeting agreed to form an association for Yorkshire and appointed a Representative Committee to obtain the necessary funds, about £400 was promised in the room. There was some discussion about giving representation to subscribing authorities and though an amendment securing such representation was rejected, Miss Dendy strongly advised the committee to welcome such representation, and such was her influence that I have no doubt her advice will be followed.

Lady Visitor.

Throughout the year the Lady Visitor (Mrs. Malkin) has continued her work. In addition to leaflets on "How to bring up children" (1283), and the "Proportions of milk and water suitable for a baby's meal" (1283), she has distributed leaflets at the appropriate seasons on "The dangers of Measles and how to avoid them" (368), and on "Precautions against Epidemic Diarrhœa" (868).

Once again there is a reduction in the number of cases of improper feeding, of which 70 cases were discovered in the previous 12 months.

The statistics of her visits are as follows:—

Nov., 1909—Nov., 1910.		
Houses visited.	Children attended by Medical Man.	Died before visit.
1408 (1333)	153 (138)	82 (75)
Removals before visit.	Advice accepted.	Advice refused.
54 (85)	1010 (955)	115 (78)
Breast feeding.	Bottle fed.	Improper feeding.
1056 (903)	162 (185)	54 (70)

(The figures for the previous year are in brackets.)

Scavenging.

The removal of house refuse and the cleansing of privies and ashpits throughout the Borough is done by the Sanitary Department, under the command of your Inspector, Mr. Savage. The work is done satisfactorily and efficiently, and in the isolated cases where there is any neglect, and in many cases where there is no real neglect, the inhabitants have no hesitation in reminding Mr. Savage that such and such ashpits require emptying.

The night-soil is sent away by rail, as far as possible, to farmers, whenever such a course is made possible by a demand for the material, but there is no doubt that the provision of a Refuse Destructor is an urgent matter, for the tips—whatever course is taken to keep them free from night-soil—have undoubtedly, from time to time, become offensive and a nuisance. The provision of a Refuse Destructor is still under discussion, and we are earnestly hoping for permission to utilise the most satisfactory site.

**Water Closets
and
Privy Ashpits.**

During the year a census was taken of the water closets, waste water closets, and privy ashpits of the Borough. The figures do not include water closets inside houses. Approximately it was found that there were 1807 outside water closets and 2220 outside waste water closets, total 4027. Covered ashpits 2924, and old open privy ashpits (chiefly in outlying parts of the Borough) 257, total 3181. At present, therefore, it is probable that the population on the water carriage system is to the population on the privy ashpit system roughly in the proportion of 4 to 3, and we are tackling the privy ashpits at the rate of over 100 a year. In 1910, 110 privy ashpits were so converted into clean water closets. At this rate it will be some time before the whole town is on the water carriage system, but as the number of privy ashpits is practically stationary and the number of water closets steadily increasing it is clear that year by year a larger proportion of the population will be on the water carriage system. I hope that for 1911 even larger financial provision may be made for conversions than in 1910.

**Special
inspections.**

34 inspections of the 17 cowsheds in the Borough have been made during the year, and 53 inspections of the 31 purveyors of milk on the register.

Offensive trades are carried on in 5 places in the Borough—1 fellmonger and 4 tripe dealers. Their premises are inspected weekly.

Canal Boats.

There are no canal boats in the district or registered as belonging to the district, but 47 canal boats coming into the district from outside have been inspected, and in two cases

notices have been served ; all the other boats have been found to be satisfactory.

Nuisances.

At the end of 1909 there were 35 nuisances in hand, and 482 nuisances were reported during the year. 464 were abated during the year and 63 remain in hand. 474 legal notices were served for the abatement of nuisances. In 3 cases legal proceedings were taken, in all cases successfully.

Food and Drugs.

There were 14 seizures of unsound food during the year, but in no case was it necessary for prosecution to follow.

120 samples of food and drugs were taken during the year, and in 2 cases proceedings were taken before the magistrates ; and 32 smoke observations were taken, and 11 legal notices were served to abate the nuisance of excessive black smoke.

Slaughter Houses.

The 21 Slaughter houses of the town are inspected weekly by your Sanitary Inspector, and not only the slaughter houses but all meat brought into the market week by week is similarly inspected, and wherever there is any question as to the soundness it is further inspected by me personally. The occasions for destroying any food intended for human consumption in the town are not very frequent and during the past year amounted only to 14 cases.

Factories and Workshops.

21 Inspections of Factories, 103 of Workshops, and 15 of Workplaces (139 in all) have been made. In connection with these inspections it was necessary to send four written notices. The following defects were found and remedied :—

Want of Cleanliness	...	...	...	...	7
Want of Ventilation	...	...	...	..	7
Overcrowding	...	...	...	...	3
Insufficient Sanitary accommodation	...	...	...	...	7
Unsuitable Sanitary accommodation	...	...	...	...	1
Sanitary accommodation not separate for sexes	...	...	...	...	1

8 Lists of outworkers were received from 4 employers and 21 inspections were made of outworkers' premises. There are 147 workshops on the register, including 21 bakehouses. Action was taken in 8 matters referred to us by His Majesty's Inspector of Factories.

Water Supply.

The water provided throughout the Borough comes from your two Reservoirs at Ingbirchworth and Midhope, the addition of this last Reservoir having provided not only a sufficient supply for Barnsley but for the surrounding districts. This is a matter of immense importance to the town, for the

health of the surrounding districts is thereby beneficially affected. The supply is constant day and night, and of such ample quantity that it is possible for the Water Committee to supply water free for water closets in the Borough; thereby materially assisting the policy of converting privies into water closets.

Milk Supply.

The milk supplied and sold in the Borough is, on the whole, of a satisfactory quality. Throughout the year there has been no suspicion of any milk-caused epidemic. In addition to the frequent taking of samples of milk and their examination for the proper quantity of fat, we have recently taken samples with a view to finding out whether they contained tubercle bacilli. The milk from one suspected cow was found to contain such bacilli, and the cow was destroyed by the owner. The greater part of the milk supply of the town is brought into the town by farmers of the neighbourhood in horse-drawn vehicles, and sold by them from door to door. There are also 39 purveyors of milk, including 2 dairies, importing milk into the town from a wider area, and the quality of milk sold by them is satisfactory.

Rivers.

Apart from the trade pollution of streams, that is to say, by the discharge of iron water from the mines, there is now, thanks to thoroughly up-to-date sewage disposal works, practically no pollution of the Dearne or the streams in the district.

The drainage throughout the town proper is thoroughly satisfactory. A very large proportion of the surface drainage is kept separate from the sewage, and this proportion increases every year. The sewage is finally treated at the recently enlarged sewage works under the control of your able and efficient Borough Surveyor.

Housing.

The houses of the district, as a whole, are substantial and satisfactory in character, though some of the older houses, even the biggest and best of them, are definitely damp by reason of the nature of the sub-soil, and the high level at which the sub-soil water lies. Even those houses which are built on the sandstone are not free from damp, because under the sandstone lies clay, with the result that the sandstone itself is saturated with moisture. In fact it was just this dampness of the climate that first led to the rise of Barnsley into a town, because such natural moisture was essential for linen weaving in the old days of hand-loom. Many of the old houses whose living-rooms are approached by steps, are relics of the days when the hand-loom was in the cellar partly above the level of the street and partly below it. Even the oldest of the houses now inhabited can, by a sufficiency of energy, and soap and

water, be made a perfectly suitable place for human beings to live in. We have, of course, no cellar dwellings. Even in the worst of our so-called slums the persistent use of soap and water would make an enormous difference to the dwellings, to the street, and to the health of the inhabitants. Even new property, and by that I mean houses built within the last three years, can be made unfit for human habitation by persistent neglect, and in one case recently we have been obliged to proceed against the tenants of such a new house for allowing it to become so dirty as to become a nuisance and danger to the public health.

230 new dwelling-houses have been erected and certified fit for occupation during the year. 96 of these contain 2 bedrooms, 124, 3 bedrooms each, while 10 villas and semi-detached villas have more than three bedrooms each. This means that modern houses are springing up in various parts of the town chiefly in the direction of the Park and on the land between North Eldon Street and Harborough Hill Road, just above where the old health giving waters of Barnsley used to be found.

In the Borough the proper housing of the working classes is largely a matter of the domestic economy of the individual. Those who wish for a good neighbourhood and a comparatively new house can obtain it for rents varying between 5/- and 7/6 per week. Some who prefer to spend 3/6 only on their house rent and to reserve the balance for alcohol, and amusements, and gambling, naturally have to be satisfied with older houses, and unfortunately are just the people who find it too much trouble to keep their houses clean. Some of the oldest houses in the Borough, which were built for the purpose of linen weaver's houses, are among the cleanest and most respectable, owing to the special care with which the tenants are selected.

**Geographical
and
Economical.**

The end of the first decade of the 20th century provides a suitable occasion for a description of certain geographical and social conditions which characterize the town of Barnsley, thereby complying with an annual request of the Local Government Board.

Barnsley is built on the steep south-western side of the Dearne valley, where that river takes a sweep to the south before turning east to Cudworth and Darfield. The river itself is about 150 feet above sea level; the May-day Green market place, five-eighths of a mile from the river, is 300 feet above sea level; and the top of Loeke Park, five-eighths of a mile further off, is over 500 feet above sea level. Immediately to the south of Loeke Park is the steep escarpment of Worsbrough Dale valley which runs from Dodworth in the west to join the Dearne valley at Stairfoot. Down into this valley the Borough

boundary dips to meet the Dodworth boundary at Gilroyd. It is a few outlying houses in this valley which cannot be connected with the sewage system of the Borough, and it is here that an occasional new privy ashpit has to be erected.

The town itself is surrounded on all sides by agricultural land so that within the limits of the Borough there are a very few farm houses with their outbuildings to which it has not been possible to extend sewers. These places are, as yet, practically in the country, and such a system is not there the danger to health which it is found to be in the town; in fact, for country use, as Sir Richard Thorne Thorne used to point out, a properly maintained privy ashpit can be made a perfectly suitable method of dealing with excreta.

To the west of the town, about 10 miles away, lie the Yorkshire moors, from which the prevalent westerly winds blow. To the east lies the valley of the Dearne, with, on the far side of the valley, a plateau extending as far as the York Plain.

With the exception of a few colliery villages there is a great tract of agricultural country on this side of the Dearne across which the easterly winds of the Spring blow. To the north for 8 miles the country is again agricultural and purely rural. To the South, in the direction of Sheffield (16 miles) there is a fairly constant succession of mining villages and manufacturing towns, but these too are surrounded by a great deal of purely agricultural country, with many woods and large parks.

Such being the position and surroundings of the town, it is thoroughly wind-swept from every quarter of the compass, with a possible exception of due south. It has often struck me that even in the hottest weather there are very few of the most ancient courts where the air is stagnant.

From an economic point of view, Barnsley is an entirely exceptional place. To illustrate what I mean, it is well-known that when the Beckett Hospital was first started only those inhabitants were eligible for treatment as out-patients whose wages did not exceed 21/- a week. Recently it was found that if that wage limit was adhered to, only the smallest minority of the patients assisted by the Hospital would be eligible, and therefore the wage limit was raised to 25/- The population being very largely engaged in mining it is possible for the great majority of the inhabitants to earn a considerably higher wage than 25/- a week if they so will, and I have known boys of 17 or 18 treated for accident at the Beckett Hospital who were earning 16/- or 17/- a week, independently of the wage earned by their fathers and other relatives.

It follows that the amount of extreme poverty in Barnsley is very small, and I use the term "extreme poverty" in the sense that is used by writers about the poorer classes in the great cities. There are, on the other hand, no wealthy people in Barnsley itself; certainly very few whose income exceeds £2,000 or £3,000 a year.

To these rather exceptional economic conditions is probably due the exceptionally high birth-rate, and probably also the high infant mortality. The great majority of young men in the town find prosperity, according to their standard, apparently easy of attainment, and so do not fear to marry young, and are encouraged to have large families because, after the age of 14, the children are likely to be more or less self-supporting. On the other hand large families prevent the special care for the individual child which is natural where the number of children is few, so that there is almost inevitably a waste of child life, which is deplorable when we consider, that the lives which are eliminated, are not necessarily the lives that would have been the least value to the world, and that the weakest physically are not always the unfittest to survive.

I am, Gentlemen,

Your obedient servant,

F. J. SADLER, M.A., M.B., D.P.H., Oxon.,

Medical Officer of Health.

27th February, 1911.

To the Hospitals Committee of the Town Council.

Gentlemen,

During 1910, only 419 cases were admitted to the Kendray Hospital, to which are to be added one of our Nurses who had Typhoid Fever and one Nurse and one Servant who had Scarlet Fever. The total number of cases treated during the year, therefore, was 422, which, from the Table following, was even a smaller number than in 1909. The paucity of the number might perhaps be accounted for by the fact that in Barnsley itself the number of notifications of Infectious Diseases was the lowest on record since the adoption of the Notification Act. Of the 422 cases, 66 were admitted as Typhoid Fever, 45 as Diphtheria, and 311 as Scarlet Fever.

The number of admissions from the time the Kendray Hospital reached its present dimensions are as follows :—

1904	...	628 cases	1908	...	760 cases
1905	...	691 „	1909	...	496 „
1906	...	622 „	1910	...	422 „
1907	...	594 „			

From Barnsley itself 20 cases of Typhoid Fever, 18 of Diphtheria, and 71 of Scarlet Fever, making 109 cases in all, were admitted; 310 cases came from the other contributing districts and 3 cases were members of the staff.

In tabular form the various localities sent in cases as follows :—

		Scarlet Fever.		Typhoid. Fever.		Diphtheria.		Total.
Barnsley	...	71	...	20	...	18	...	109
Ardsley	...	7	...	3	...	0	...	10
Darfield	...	11	...	3	...	5	...	19
Royston	...	77	...	0	...	1	...	78
Monk Bretton	...	28	...	1	...	0	...	29
Darton	...	5	...	1	...	5	...	11
Wombwell	...	26	...	9	...	3	...	38
Hoyland	...	15	...	1	...	0	...	16
Worsborough	...	23	...	21	...	11	...	55
Cudworth	...	12	...	4	...	1	...	17
Barnsley Rural	...	34	...	1	...	1	...	36
Dodworth	...	0	...	1	...	0	...	1
Staff	...	2	...	1	...	0	...	3
		310		66		45		422

Of the 310 cases of Scarlet Fever, 5 died, or 1·7 per cent., a figure which is rather less than the case fatality of the past nine years.

Of the 66 Typhoid patients, 11 proved not to be Typhoid Fever. Of these 11 no less than 6 died, 5 from Broncho-Pneumonia and 1 from Pneumonia. Of the 55 undisputed cases of Typhoid 10 died, 5 of the deaths being among cases so severe that they died within five days of admission. 1 of the other 5 deaths was from perforation, and one died less of Typhoid than from Nephritis with suppression of urine. Whatever the explanation, there were 10 deaths among the 55 cases, giving a case fatality of 18 per cent., which is decidedly higher than our average, though not higher than in 1902, when the number of cases admitted was correspondingly small.

Of the 45 Diphtheria cases, 9 died, a case fatality of 20 per cent. This is an usually high percentage for the Kendray Hospital. 4 of the cases required tracheotomy, and of these, 3 died, one having first recovered well from tracheotomy and subsequently dying from Nephritis, which indeed was the case of several of the other Diphtheria deaths.

This year I bring up-to-date the Table of Scarlet Fever cases treated in the Kendray Hospital during the past 10 years.

SCARLET FEVER IN KENDRAY HOSPITAL.

Year.	Cases admitted.		Deaths.		Case fatality per cent.	
1901	...	463	...	8	...	1·7
1902	...	384	...	5	...	1·3
1903	...	215	...	3	...	1·3
1904	...	462	...	12	...	2·6
1905	...	572	...	30	...	5·2
1906	...	494	...	14	...	2·8
1907	...	467	...	11	...	2·35
1908	...	587	...	23	...	3·9
1909	...	346	...	9	...	2·6
1910	...	310	...	5	...	1·7
In ten years	...	4,300		120		2·8

I have also compiled a similar Table of Typhoid Fever cases treated in the Kendray since 1901, which is also satisfactory when it is remembered that the hospital gets, as a rule, only the more serious cases.

TYPHOID FEVER IN KENDRAY HOSPITAL.

Year.		Cases admitted.		Deaths.		Case fatality per cent
1901	...	119	...	19	...	15·9
1902	...	65	...	14	...	21·5
1903	...	101	...	20	...	19·9
1904	...	91	...	13	...	14·2
1905	...	98	...	9	...	9·2
1906	...	94	...	11	...	11·7
1907	...	87	...	16	...	18·4
1908	...	146	...	21	...	14·3
1909	...	123	...	21	...	17
1910	...	55	...	10	...	18
Totals	...	979		154		15·6

In 5 of the 10 cases which died it was clear from the first that the new antigen treatment could be of no avail. In one of the remaining fatal cases the antigen treatment was not, as a matter of fact, used. There remain 4 fatal cases in which, after giving promise of better things, the antigen treatment failed to save life. On the other hand the influence of the new antigen treatment in shortening the period of disease and improving the condition of the patient (in one case quite definitely saving life) was most satisfactory, so that where cases of Typhoid are removed to the Hospital early enough in the disease, I think we have found a means of making the disease less severe, and the period of incapacity after the disease shorter.

My thanks are due to Dr. Fryer, the Matron, and the Nursing Staff, for the indefatigable assistance which they have once more given me during the year, and also to Dr. Harold Horne for his assistance when Dr. Fryer was on his holiday and when I was taking mine; also to other Medical men who, in an emergency, have kindly given their assistance.

I have the honour to be, Gentlemen,

Your obedient servant,

F. J. SADLER, M.A., M.B., D.P.H., Oxon.,

Medical Officer.

February, 1911.

TABLE I.
Vital Statistics of Whole District during 1910 and Previous Years.

Year.	Population estimated to middle of each year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District.		Nett.		Zymotic Death Rate.
		Number.	Rate.*	Under 1 year of age		At all ages.					Deaths under 1 year.	Deaths under 5 years.			
				Number.	Rate per 1,000 Births registered	Number.	Rate.*								
1900	40500	1345	33.20	246	182.90	900	22.22	99	49	17	21.43	27.33	44.44	4.02	
1901	41083	1489	36.24	286	192.06	936	22.78	123	50	25	22.15	30.55	44.18	5.40	
1902	41800	1445	34.56	273	188.93	837	20.02	124	52	21	19.28	33.62	48.26	3.06	
1903	42400	1575	37.14	276	175.24	895	21.10	119	66	16	19.92	32.66	48.99	3.79	
1904	43700	1506	34.46	274	181.94	850	19.45	129	67	34	18.69	33.66	49.73	4.42	
1905	44000	1491	33.88	224	150.23	781	17.75	128	68	26	16.79	30.18	45.20	2.38	
1906	44500	1567	35.21	270	172.30	886	19.91	147	72	20	18.74	32.37	46.88	3.55	
1907	45000	1520	33.77	236	155.26	899	19.97	175	86	18	18.46	28.39	44.76	3.24	
1908	45500	1624	35.69	263	161.94	913	20.06	167	77	24	18.90	30.58	43.14	3.23	
1909	46500	1614	34.70	218	135.06	848	18.24	134	64	23	17.36	27.02	40.73	1.78	
Averages for years 1906-1909	43498	1517	34.81	256	169.59	874	20.05	134	65	22	19.07	32.12	45.63	3.48	
1910	48000	1581	32.95	244	154.32	794	16.54	111	55	22	15.86	32.06	45.85	2.66	

* Rates calculated per 1,000 of estimated population.

Area of District (exclusive of area covered by water) 2,386 acres.

Total population at all ages ...	...	41,083
Number of inhabited houses...	...	8,563
Average number of persons per house	...	4.79

} at Census of 1901.

1910.

<p>I. Institutions within the District receiving sick and infirm persons from outside the District.</p>	<p>II. Institutions outside the District receiving sick and infirm persons from the District.</p>	<p>III. Other Institutions, the deaths in which have been distributed among the several localities in the District.</p>
<p>Beckett Hospital. Barnsley Union Workhouse.</p>	<p>Kendray Hospital for Infectious Diseases Lund Wood Small-pox Hospital West Riding Lunatic Asylums</p>	<p>General Infirmary, Leeds Royal Infirmary, Sheffield Wakefield Union Workhouse</p>

Is the Union Workhouse within the District? Yes.

TABLE II. (IV. of L. G. B.)

Causes of, and Ages at, Death in Barnsley during year 1910.

Diseases.	At all Ages.	Under 1 year	1—2	2—5	5—15	15—25	25—30	30—	40—	50—65	65—	70—	80—	90—
Measles	8	3	4	1	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	1	...	...	1	...	...	...	...	...	...	...	...	...	...
Whooping Cough	53	28	14	9	2	...	...	...	...	...	...	...	...	...
Diphtheria and Membranous Croup...	2	...	...	...	2	...	...	...	...	...	...	...	...	...
Croup	3	1	1	1	...	...	...	...	...	...	...	...	...	...
Enteric Fever	7	...	...	...	...	2	1	3	1	...	...	...	...	...
Epidemic Influenza	13	2	1	1	...	...	1	...	1	3	4	...	...	...
Diarrhœa	57	44	10	1	...	...	...	...	...	1	...	1	...	...
Enteritis	5	...	...	1	...	2	...	1	...	...	...	1	...	...
Puerperal Fever	1	...	...	...	...	...	1	...	...	...	...	1	...	...
Erysipelas	3	...	...	1	...	...	1	...	...	...	...	1	...	...
Other Septic Diseases	4	...	...	...	...	1	1	...	1	1	...	...	...	...
Phthisis	50	2	1	1	4	11	6	15	6	3	1	...	...	...
Other Tubercular Diseases	23	6	6	4	2	2	...	1	1	1	...	...	...	...
Cancer, Malignant Disease	42	1	1	...	...	...	...	1	5	20	4	10	...	...
Bronchitis	61	18	9	2	...	...	1	2	2	12	2	9	4	...
Pneumonia	30	7	3	6	2	1	1	2	2	5	...	1	...	...
Pleurisy	2	...	...	...	...	...	...	1	...	...	1	...	...	...
Broncho-Pneumonia	30	16	5	4	...	1	...	...	2	2	...	...	...	...
Other Diseases of the Respiratory Organs	7	5	...	...	...	...	...	...	1	...	...	1	...	...
Alcoholism and Cirrhosis of Liver	6	...	...	...	...	...	...	...	3	2	...	1	...	...
Premature Birth	37	37	...	...	...	...	...	...	...	...	...	...	...	...
Diseases and Accidents of Parturition	6	...	...	...	...	2	2	1	1	...	...	...	...	...
Heart Diseases... ..	41	...	...	...	1	3	1	3	6	17	3	5	2	...
Accidents	27	4	1	2	5	1	...	1	4	4	2	3	...	...
Suicides... ..	8	...	...	...	1	2	1	1	2	1	...	...	...	...
Acute Rheumatism	3	...	...	...	...	...	2	...	1	...	...	...	...	...
Diseases of Nervous System	35	6	3	1	...	2	...	...	6	9	5	2	1	...
Diseases of Digestive System	4	3	...	...	...	...	...	...	...	...	...	...	1	...
Diseases of Urinary and Generative Systems	30	2	...	3	1	...	...	...	2	11	7	1	3	...
Old Age... ..	52	...	...	...	...	...	...	...	...	1	2	27	20	2
Debility, Atrophy, Malnutrition, Marasmus	28	26	1	1	...	...	...	...	...	...	...	...	...	...
Congenital Defects	5	4	...	...	1	...	...	...	...	...	...	...	...	...
Cerebral Hæmorrhage	17	...	...	...	...	...	...	...	...	2	4	10	1	...
All other causes	60	29	3	2	5	1	3	2	1	8	4	2	...	...
All causes	761	244	63	42	26	31	22	34	48	103	39	75	32	2

Deaths of Non-residents registered in Public Institutions
in the District 55

Deaths of Residents in Public Institutions in the District ... 56

Births ...	1581
Male... ..	802
Female ...	779
Male... ..	59
Female ...	42
Deaths in Public Institutions... ..	111
Including Deaths of Non-Residents	55

TABLE III.

Cases of Infectious Disease notified during the Year 1910.

Notifiable Disease.	Cases notified in whole District.							Total Cases removed to Hospital.
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	
Diphtheria (including Membranous Group)	22	...	4	15	...	3	...	18
Erysipelas ...	29	1	...	2	3	20	3	...
Scarlet Fever	84	...	23	50	9	2	...	71
Enteric Fever	23	...	1	2	6	14	...	*20
Puerperal Fever	1	...	...	...	1	...	...	...
Totals ...	159	1	28	69	19	39	3	109

* 6 of these cases were not Enteric Fever, and 1 other was doubtful.

Isolation Hospitals provided by Barnsley Corporation | Kendray Hospital, Ardsley, near Barnsley.
and Contributing Authorities | Lund Wood Hospital, Monk Bretton, near Barnsley.

Total available beds, 150.. Number of Diseases that can be concurrently treated, 4.

TABLE IV.

DEATHS FROM PHTHISIS AND RESPIRATORY DISEASES.

Class of Disease.	Total Deaths.	Deaths per 1,000 Persons living.	Percentage of Total Deaths.
Phthisis	50	1·04	6·57
Bronchitis	61	1·27	8·01
Pneumonia	30	·62	3·94
Pleurisy	2	·04	·26
Broncho-Pneumonia and other Respiratory Diseases ...	37	·77	4·90
Total	180	3·74	23·68

TABLE V.

Showing the number of Deaths from each of the Seven Principal Zymotic Diseases in the Eleven Years 1900 to 1910, omitting Deaths from other Sanitary Districts, but including Deaths from Barnsley in the Kendray and Lund Wood Hospitals.

Disease.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Average Number of Deaths for 10 years.	Deaths in 1910.	Zymotic Death Rates, 1910.
Small-pox ... ..	...	...	2	1	5	3	...	...	...	...	1·1	...	...
Measles	37	62	19	56	23	28	11	44	10	26	31·6	8	·16
Scarlet Fever ...	14	18	6	2	11	8	17	10	12	3	10·1	1	·02
Diphtheria and Membran. Croup	19	10	19	9	9	4	7	4	1	...	8·2	2	·04
Whooping Cough	26	13	11	21	27	3	17	24	32	1	17·5	53	1·10
Enteric Fever ...	7	32	18	10	19	8	7	11	16	10	13·8	7	·14
Diarrhoea	58	87	53	62	99	51	99	53	76	43	68·1	57	1·20
Totals	161	222	128	161	193	105	158	146	147	83	150·4	128	2·66

TABLE VI.

BIRTHS AND DEATHS REGISTERED; DEATHS UNDER 12 MONTHS; AND NUMBER OF DEATHS FROM VARIOUS CAUSES IN EACH MONTH OF THE YEAR 1910; AND ALSO DEATHS IN PUBLIC INSTITUTIONS.

1910.	Births.	Deaths.	Deaths under 1 year.	Small-pox.	Scarlet Fever.	Diphtheria and Membranous Croup.	Typhoid Fever.	Measles.	Whooping Cough.	Respiratory Diseases except Phthisis.	Influenza.	Phthisis.	Injuries.	Diarrhoea.	Public Institutions.
January	134	74	20	...	...	...	1	4	...	11	4	9	5	2	10
February	131	53	11	...	...	...	...	...	...	12	2	2	...	3	14
March	136	55	17	...	...	...	...	...	...	13	...	6	1	2	7
April	135	61	18	...	...	...	...	...	1	15	3	3	...	1	...
May	145	59	16	...	...	...	1	1	1	11	2	5	1	1	10
June	125	54	11	...	...	1	3	...	3	4	...	4	3	3	13
July	134	59	16	...	...	...	...	1	5	7	...	5	1	4	5
August	145	72	37	...	...	...	...	...	18	5	...	4	1	11	6
September	134	77	38	...	...	...	2	1	9	6	...	1	3	21	6
October	123	72	18	...	...	1	...	1	5	9	...	2	4	7	12
November	122	68	19	...	...	...	...	...	4	12	2	5	3	1	10
December	117	90	23	...	...	...	...	...	7	25	...	4	5	1	11
Totals	1581	794	244	0	1	2	7	8	53	130	13	50	27	57	111

TABLE VII.
Temperature and Rainfall in Barnsley in 1910.

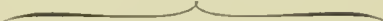
Month.	Maximum.	Minimum.	Days on which 50° was reached.	Days on which 70° was reached.	Days of Frost.	Days on which 4ft. Earth Therm'eter registered 56° or more	Days on which rain fell.	Amount in inches.
January ...	55°	17°	5	...	16	<div style="text-align: center;"> Nil  </div>	21	2.48
February ...	52°	30°	7	...	11		25	2.30
March ...	56°	31°	15	...	4		8	.37
April ...	59°	29°	21	...	3		20	2.13
May ...	71°	36°	28	2	...		21	2.29
June ...	76°	46°	30	11	...		14	3.92
July ...	73°	47°	31	4	...		15	3.16
August ...	72°	48°	31	6	...		20	3.59
September ...	68°	41°	30	...	...		8	.23
October ...	66°	39°	28	...	...		16	2.16
November ...	52°	28°	1	...	16		18	3.34
December ...	54°	29°	5	...	2		23	3.57
Totals ...	...	...	232	23	52	0	209	29.54
Average for preceding 40 years ...	...	...	220	35.2	53.2	Av. for 18 yrs. 50.6	189	29.12

TABLE VIII.

Table V. of L. G. B.
Deaths from stated Causes in Weeks and Months under One Year of Age.

Infantile Mortality during the Year 1910.

Cause of Death.	Under 1 Wk	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 month.	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year.
All Causes—Certified	40	9	19	5	73	23	23	14	14	15	14	14	11	18	11	14	244
Common Infectious Diseases—																	
Measles .. ..	..	..	..	..	..	..	2	1	3	2	3	2	2	1	3	3	3
Whooping Cough .. ..	..	..	..	..	..	..	..	..	..	..	..	4	..	3	..	..	29
Diarrhoeal Diseases—																	
Diarrhoea, all forms .. ..	..	..	2	2	4	2	4	6	2	2	2	2	3	4	3	6	40
Enteritis, Muco-enteritis, Gastro-enteritis .. ..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	2
Gastritis, Gastro-intestinal Catarrh.. ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2
Wasting Diseases—																	
Premature Birth	23	4	4	1	32	3	2	..	..	..	..	..	..	..	..	..	37
Congenital Defects .. ..	..	..	1	1	2	..	1	1	..	..	..	..	..	..	..	..	4
Injury at Birth	2	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3
Want of Breast-milk, Starvation .. ..	..	..	3	..	3	4	3	2	2	3	2	..	..	1	..	1	3
Atrophy, Debility, Marasmus	2	1	3	..	6	..	..	..	..	..	..	..	..	..	..	..	24
Tuberculous Diseases—																	
Tuberculous Meningitis .. ..	..	..	..	..	..	..	..	..	1	2	2	..	..	..	..	..	2
Tuberculous Peritonitis, Tabes Mesenterica .. ..	..	..	..	..	..	1	..	..	..	..	..	..	1	2	..	..	4
Other Tuberculous Diseases .. ..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3
Other Causes—																	
Meningitis (not Tuberculous)	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	3
Convulsions	3	..	1	..	4	..	..	..	..	..	1	..	..	..	1	..	6
Bronchitis	1	1	1	..	3	4	3	1	1	2	2	..	1	2	..	1	20
Laryngitis .. ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Pneumonia .. ..	..	1	1	..	2	1	4	1	3	2	1	1	3	..	4	2	24
Suffocation, overlying.. ..	1	..	..	1	2	1	1	..	1	..	..	..	..	5	..	..	3
Other causes	7	1	3	..	11	5	2	1	1	1	..	4	1	..	..	..	31
	40	9	19	5	73	23	23	14	14	15	14	14	11	18	11	14	244

District of Barnsley Borough.

Population (estimated to middle of 1910) 48,000

Births in the year—legitimate, 1,480; illegitimate, 101.

Deaths in the year of legitimate infants, 214; illegitimate infants, 30.

Deaths from all Causes at all Ages, 761.

TABLES A to D.

A SCARLET FEVER DEATH RATES FOR 40 YEARS.

Years.	Scarlet Fever Death Rates.	Years.	Scarlet Fever Death Rates.	Years.	Scarlet Fever Death Rates.	Years.	Scarlet Fever Death Rates.
1871	·17	1881	·13	1891	·25	1901	·44
1872	·04	1882	1·24	1892	·24	1902	·14
1873	5·06	1883	·30	1893	·53	1903	·04
1874	2·80	1884	3·87	1894	·10	1904	·25
1875	·62	1885	1·71	1895	·40	1905	·18
1876	·27	1886	1·52	1896	·59	1906	·38
1877	·27	1887	1·78	1897	·54	1907	·22
1878	·57	1888	·49	1898	·02	1908	·27
1879	1·58	1889	·23	1899	·21	1909	·06
1880	1·58	1890	·05	1900	·32	1910	·02

B SCARLET FEVER STATISTICS FOR 20 YEARS OF COMPULSORY NOTIFICATION.

1	2	3	4	5	5	7	8
Years.	Scarlet Fever Cases Notified.	Percentage of Cases nursed at home with	Case Fatality.	Percentage of Cases isolated in Kendray with	Case Fatality.	Percentage of Notifications under 5 years.	Percentage of Notifications 5 years and upwards.
1891	73	76·8	10·7	23·2	17·6	33	67
1892	112	92	7·7	8	11·1	31	69
1893	283	95·8	7	4·2	8·3	37	63
1894	240	85·5	3·9	14·5	8·5	44	56
1895	280	75	6·6	25	2·8	48	52
1896	326	47·3	6·4	52·7	8·1	41	59
1897	230	42·2	14·4	57·8	6	42	58
1898	99	11·2	0	88·8	1·1	26	74
1899	151	42·4	9	57·6	3·4	39	61
1900	297	26	14·28	74	1·37	34	66
1901	396	51·3	5·91	48·7	3·1	22	78
1902	346	41·4	2·79	58·6	·98	28	72
1903	105	39	4·8	61	0	35	65
1904	222	35·6	10	64·4	2·11	28	72
1905	255	26·3	3	73·7	3·2	32	68
1906	244	23·4	19·3	76·6	3·2	27	73
1907	249	22·8	8·7	77·2	2·6	22	78
1908	240	10·4	12	89·6	4·2	28	72
1909	104	16·3	0	83·7	3·4	35	65
1910	84	15·4	0	84·5	1·4	28	72

C Number of Deaths in Barnsley from the seven principal Zymotic Diseases during Four Decades, including Deaths at Kendray and Lund Wood Hospitals of Barnsley Residents.

	Decade 1871-1880	Decade 1881-1890	Decade 1891-1900	Decade 1901-1910
Small-pox	9	4	5	11
Measles	130	195	299	287
Diphtheria	23	58	65	65
Whooping Cough ...	135	175	195	202
Typhoid Fever	197	75	145	138
Diarrhœa	456	358	650	681
Scarlet Fever	342	355	135	88

N B.—The Kendray Hospital was opened in 1891.

D Comparative Table of Notifications for preceding Seventeen Years.

Year.	Small-pox.	Scarlet Fever.	Diphtheria and Membranous Croup.	Erysipelas.	Puerperal Fever.	Typhoid Fever.	Total Notifications.
1892	43	112	57	29	2	11	254
1893	26	283	79	63	9	236	696
1894	5	240	51	39	4	125	464
1895	3	280	36	33	6	124	482
1896	1	326	52	26	10	76	491
1897	...	230	18	37	6	52	343
1898	...	99	18	33	2	133	285
1899	...	151	20	40	8	76	295
1900	...	297	47	28	9	87	468
1901	...	396	43	36	10	164	649
1902	15	346	52	39	11	86	549
1903	38	105	52	33	7	58	293
1904	89	222	56	38	4	78	485
1905	59	255	29	28	5	66	442
1906	...	244	45	42	4	53	388
1907	...	249	24	22	4	47	346
1908	...	240	16	28	2	78	364
1909	...	104	11	16	1	58	190
Average of preceding 10 years }	20·1	245·8	37·5	31·0	5·7	77·5	417·4
1910	Nil	84	22	29	1	23	159

TABLE IX.

SANITARY WORK DONE IN 1908, 1909, AND 1910.

	1908	1909	1910
Notices served for the Sanitary Amendment of Houses and Premises	700	528	474
Seizures of Unsound Meat and Food	9	11	14
Prosecutions for exposing Unsound Meat for Sale ...	2	1	0
Prosecutions under Food and Drugs Act... ..	1	2	2
Samples taken under the Sale of Food and Drugs Act... 107	107	107	120
Privy Ashpits converted to Water Closets '	97	143	110
New Water Closets constructed	104	192	183
New Waste Water Closets	55	18	0
New Privy Ashpits	0	5	2
Cases of Infectious Disease Notified and Visited ...	364	190	159
Total Number of Cases isolated in the Kendray Hospital	760	494	422
Total Number of Cases isolated in the Lund Wood do.	0	0	0
Cases of Scarlet Fever isolated from Barnsley	215	87	71
Cases of Enteric Fever isolated from Barnsley	70	52	20
Cases of Diphtheria isolated from Barnsley	12	7	18
Cases of Small-pox isolated from Barnsley	0	0	0
Patients admitted to Kendray Hospital from other Districts	463	348	313
Patients admitted to Lund Wood Hospital from other Districts	0	0	0